



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,914	12/11/2000	David Cheo	IVGN 251	2341

65482 7590 06/01/2007
INVITROGEN CORPORATION
C/O INTELLEVATE
P.O. BOX 52050
MINNEAPOLIS, MN 55402

EXAMINER

KETTER, JAMES S

ART UNIT	PAPER NUMBER
----------	--------------

1636

MAIL DATE	DELIVERY MODE
-----------	---------------

06/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/732,914

Applicant(s)

CHEO ET AL.

Examiner

James S. Ketter

Art Unit

1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22,35-37,40-42,47-54,69,77-100,103-119 and 143-150 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22,35-37,40-42,47-54,69,77-100,103-119 and 143-150 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

- 5) ☐ Notice of Informal Patent Application

- 6) ☒ Other: NOTICE TO COMPLY - SEQUENCE
CRF ERROR REPORT

Art Unit: 1636

This application is in condition for allowance except for the following formal matters:

The Computer readable Form of the sequence listing contains errors found by the Scientific and Technical Information Center (STIC), as set forth in the attached Error Report.

The errors must be corrected before the case can be passed to issue.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Ketter whose telephone number is 571-272-0770. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel can be reached on 571-272-0781. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1636

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSK
28 May 2007



JAMES KETTER
PRIMARY EXAMINER

Notice to Comply	Application No. 09/732,914	Applicant(s) CHEO et al.	
	Examiner James Ketter	Art Unit 1636	

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☐ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e). The correct SEQ ID NO:2 is present in the paper copy of the of the sequence listing only. Therefore a search of the correct sequence is not possible.
- ☐ 7. Other:

Applicant Must Provide:

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☐ An initial or substitute paper copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application.**
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216 or (703) 308-2923

For CRF Submission Help, call (703) 308-4212 or 308-2923

PatentIn Software Program Support

Technical Assistance.....703-287-0200

To Purchase PatentIn Software.....703-306-2600

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/732,914B
Source: IFU616
Date Processed by STIC: 3/13/07

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 _____ Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	69/732 914B
2 _____ Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 _____ Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 _____ Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 _____ Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 _____ PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 _____ Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 _____ Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 _____ Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 _____ Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 _____ Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 _____ PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 _____ Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid	



IFW16

RAW SEQUENCE LISTING

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:47

Input Set : N:\efs\03_12_07\09732914B_efs\IVGN251_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

3 <110> APPLICANT: Invitrogen Corporation
 4 Cheo, David
 5 Brasch, Michael A.
 6 Temple, Gary F.
 7 Hartley, James L.
 8 Byrd, Devon R.N.

10 <120> TITLE OF INVENTION: Use of Multiple Recombination Sites With Unique Specificity
 in Recombinational Cloning

11
 13 <130> FILE REFERENCE: IVGN 251.2 CIP
 15 <140> CURRENT APPLICATION NUMBER: 09/732,914B
 16 <141> CURRENT FILING DATE: 2000-12-11
 18 <150> PRIOR APPLICATION NUMBER: 60/169,983
 19 <151> PRIOR FILING DATE: 1999-12-10
 21 <150> PRIOR APPLICATION NUMBER: 60/188,020
 22 <151> PRIOR FILING DATE: 2000-03-09
 24 <160> NUMBER OF SEQ ID NOS: 141
 26 <170> SOFTWARE: PatentIn version 3.3
 28 <210> SEQ ID NO: 1
 29 <211> LENGTH: 27
 30 <212> TYPE: DNA
 31 <213> ORGANISM: Artificial
 33 <220> FEATURE:
 34 <223> OTHER INFORMATION: (attB0) -Invalid
 36 <400> SEQUENCE: 1 Response
 37 agcctgcttt tttatactaa cttgagc

40 <210> SEQ ID NO: 2
 41 <211> LENGTH: 27
 42 <212> TYPE: DNA
 43 <213> ORGANISM: Artificial
 45 <220> FEATURE:
 46 <223> OTHER INFORMATION: (attP0) -Invalid
 48 <400> SEQUENCE: 2 Response
 49 gttcagcttt tttatactaa gttggca

52 <210> SEQ ID NO: 3
 53 <211> LENGTH: 27
 54 <212> TYPE: DNA
 55 <213> ORGANISM: Artificial
 57 <220> FEATURE:
 58 <223> OTHER INFORMATION: (attL0) Same
 60 <400> SEQUENCE: 3 error
 61 agcctgcttt tttatactaa gttggca

64 <210> SEQ ID NO: 4
 65 <211> LENGTH: 27

Spec Not Comp
 (pg.1-5)

← PLS
 27
 explain
 Source of
 genetic material.

See item # 11
 27
 on error
 Summary
 Sheet
 3/13/2007

RAW SEQUENCE LISTING

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:47

Input Set : N:\efs\03_12_07\09732914B_efs\IVGN251_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

66 <212> TYPE: DNA
67 <213> ORGANISM: Artificial
69 <220> FEATURE:
70 <223> OTHER INFORMATION: attR0
72 <400> SEQUENCE: 4

Same error

73 gttcagcttt tttatactaa cttgagc

27

76 <210> SEQ ID NO: 5

77 <211> LENGTH: 25

78 <212> TYPE: DNA

79 <213> ORGANISM: Artificial

81 <220> FEATURE:

82 <223> OTHER INFORMATION: attB1

Same error

84 <400> SEQUENCE: 5

85 agcctgcttt tttgtacaaa cttgt

25

88 <210> SEQ ID NO: 6

89 <211> LENGTH: 27

90 <212> TYPE: DNA

91 <213> ORGANISM: Artificial

93 <220> FEATURE:

94 <223> OTHER INFORMATION: attP1

Same error

96 <400> SEQUENCE: 6

97 gttcagcttt tttgtacaaa gttggca

100 <210> SEQ ID NO: 7

101 <211> LENGTH: 27

102 <212> TYPE: DNA

103 <213> ORGANISM: Artificial

105 <220> FEATURE:

106 <223> OTHER INFORMATION: attL1

Same error

108 <400> SEQUENCE: 7

109 agcctgcttt tttgtacaaa gttggca

27

112 <210> SEQ ID NO: 8

113 <211> LENGTH: 25

114 <212> TYPE: DNA

115 <213> ORGANISM: Artificial

117 <220> FEATURE:

118 <223> OTHER INFORMATION: attR1

Same error

120 <400> SEQUENCE: 8

121 gttcagcttt tttgtacaaa cttgt

25

124 <210> SEQ ID NO: 9

125 <211> LENGTH: 25

126 <212> TYPE: DNA

127 <213> ORGANISM: Artificial

129 <220> FEATURE:

130 <223> OTHER INFORMATION: attB2

Same error

132 <400> SEQUENCE: 9

133 acccagcttt cttgtacaaa gtggt

25

136 <210> SEQ ID NO: 10

137 <211> LENGTH: 27

138 <212> TYPE: DNA

25

See item
11 on
error
Summary
Sheet.

RAW SEQUENCE LISTING

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:47

Input Set : N:\efs\03_12_07\09732914B_efs\IVGN251_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

139 <213> ORGANISM: Artificial
 141 <220> FEATURE:
 142 <223> OTHER INFORMATION: (attB2)
 144 <400> SEQUENCE: 10
 145 gttcagcttt cttgtacaaa gttggca
 148 <210> SEQ ID NO: 11
 149 <211> LENGTH: 27
 150 <212> TYPE: DNA
 151 <213> ORGANISM: (attL2)
 153 <400> SEQUENCE: 11
 154 acccagcttt cttgtacaaa gttggca
 157 <210> SEQ ID NO: 12
 158 <211> LENGTH: 25
 159 <212> TYPE: DNA
 160 <213> ORGANISM: Artificial
 162 <220> FEATURE:
 163 <223> OTHER INFORMATION: (attr2)
 165 <400> SEQUENCE: 12
 166 gttcagcttt cttgtacaaa gtggt
 169 <210> SEQ ID NO: 13
 170 <211> LENGTH: 22
 171 <212> TYPE: DNA
 172 <213> ORGANISM: Artificial
 174 <220> FEATURE:
 175 <223> OTHER INFORMATION: (attB5)
 177 <400> SEQUENCE: 13
 178 caactttatt atacaaagtt gt
 181 <210> SEQ ID NO: 14
 182 <211> LENGTH: 27
 183 <212> TYPE: DNA
 184 <213> ORGANISM: Artificial
 186 <220> FEATURE:
 187 <223> OTHER INFORMATION: (attP5)
 189 <400> SEQUENCE: 14
 190 gttcaacttt attatacaaaa gttggca
 193 <210> SEQ ID NO: 15
 194 <211> LENGTH: 24
 195 <212> TYPE: DNA
 196 <213> ORGANISM: Artificial
 198 <220> FEATURE:
 199 <223> OTHER INFORMATION: (attL5)
 201 <400> SEQUENCE: 15
 202 caactttatt atacaaagtt ggca
 205 <210> SEQ ID NO: 16
 206 <211> LENGTH: 25
 207 <212> TYPE: DNA
 208 <213> ORGANISM: Artificial
 210 <220> FEATURE:
 211 <223> OTHER INFORMATION: (attR5)

SAME
 errors
 27

27

25

22

27

24

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/732,914B

DATE: 03/13/2007

TIME: 15:43:47

Input Set : N:\efs\03_12_07\09732914B_efs\IVGN251_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

213 <400> SEQUENCE: 16
214 gttcaacttt attatacaaa gttgt
217 <210> SEQ ID NO: 17
218 <211> LENGTH: 22
219 <212> TYPE: DNA
220 <213> ORGANISM: Artificial
222 <220> FEATURE:
223 <223> OTHER INFORMATION: attB11
225 <400> SEQUENCE: 17
226 caacttttct atacaaagtt gt
229 <210> SEQ ID NO: 18
230 <211> LENGTH: 27
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial
234 <220> FEATURE:
235 <223> OTHER INFORMATION: attP11
237 <400> SEQUENCE: 18
238 gttcaacttt tctatacaaa gttggca
241 <210> SEQ ID NO: 19
242 <211> LENGTH: 24
243 <212> TYPE: DNA
244 <213> ORGANISM: Artificial
246 <220> FEATURE:
247 <223> OTHER INFORMATION: attL11
249 <400> SEQUENCE: 19
250 caacttttct atacaaagtt ggca
253 <210> SEQ ID NO: 20
254 <211> LENGTH: 25
255 <212> TYPE: DNA
256 <213> ORGANISM: Artificial
258 <220> FEATURE:
259 <223> OTHER INFORMATION: attR11
261 <400> SEQUENCE: 20
262 gttcaacttt tctatacaaa gttgt
265 <210> SEQ ID NO: 21
266 <211> LENGTH: 22
267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial
270 <220> FEATURE:
271 <223> OTHER INFORMATION: attB17
273 <400> SEQUENCE: 21
274 caacttttgt atacaaagtt gt
277 <210> SEQ ID NO: 22
278 <211> LENGTH: 27
279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial
282 <220> FEATURE:
283 <223> OTHER INFORMATION: attP17
285 <400> SEQUENCE: 22

← Same
25
errors

22

27

24

25

22

RAW SEQUENCE LISTING

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:47

Input Set : N:\efs\03_12_07\09732914B_efs\IVGN251_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

286 gttcaacttt tgtatacaaa gttggca

289 <210> SEQ ID NO: 23

290 <211> LENGTH: 24

291 <212> TYPE: DNA

292 <213> ORGANISM: Artificial

294 <220> FEATURE:

295 <223> OTHER INFORMATION: attL17

297 <400> SEQUENCE: 23

298 caacttttgt atacaaagtt ggca

301 <210> SEQ ID NO: 24

302 <211> LENGTH: 25

303 <212> TYPE: DNA

304 <213> ORGANISM: Artificial

306 <220> FEATURE:

307 <223> OTHER INFORMATION: attR17

309 <400> SEQUENCE: 24

310 gttcaacttt tgtatacaaa gttgt

313 <210> SEQ ID NO: 25

314 <211> LENGTH: 22

315 <212> TYPE: DNA

316 <213> ORGANISM: Artificial

318 <220> FEATURE:

319 <223> OTHER INFORMATION: attB19

321 <400> SEQUENCE: 25

322 caactttttc gtacaaagtt gt

325 <210> SEQ ID NO: 26

326 <211> LENGTH: 27

327 <212> TYPE: DNA

328 <213> ORGANISM: Artificial

330 <220> FEATURE:

331 <223> OTHER INFORMATION: attP19

333 <400> SEQUENCE: 26

334 gttcaacttt ttcgtacaaa gttggca

337 <210> SEQ ID NO: 27

338 <211> LENGTH: 24

339 <212> TYPE: DNA

340 <213> ORGANISM: Artificial

342 <220> FEATURE:

343 <223> OTHER INFORMATION: attL19

345 <400> SEQUENCE: 27

346 caactttttc gtacaaagtt ggca

349 <210> SEQ ID NO: 28

350 <211> LENGTH: 25

351 <212> TYPE: DNA

352 <213> ORGANISM: Artificial

354 <220> FEATURE:

355 <223> OTHER INFORMATION: attR19

357 <400> SEQUENCE: 28

358 gttcaacttt ttcgtacaaa gttgt

27
 ✓ Same
 errors

24

25

22

27

24

25

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY
 PATENT APPLICATION: US/09/732,914B

DATE: 03/13/2007
 TIME: 15:43:48

Input Set : N:\efs\03_12_07\09732914B_efs\IVGN251_ST25.txt
 Output Set: N:\CRF4\03132007\I732914B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:39; N Pos. 8,9,10,11,12,13,14
 Seq#:40; N Pos. 8,9,10,11,12,13,14
 Seq#:94; N Pos. 7,8,10,11,12,14,15
 Seq#:106; N Pos. 20,21,22,23,24
 Seq#:107; N Pos. 25,26,27,28,29
 Seq#:108; N Pos. 20,21,22,23,24
 Seq#:109; N Pos. 25,26,27,28,29
 Seq#:110; N Pos. 27,28
 Seq#:113; N Pos. 26
 Seq#:114; N Pos. 27,28
 Seq#:117; N Pos. 27
 Seq#:139; N Pos. 13,14
 Seq#:140; N Pos. 13

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28
 Seq#:29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52
 Seq#:53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76
 Seq#:77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100
 Seq#:101,102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117,118
 Seq#:119,120,121,122,123,124,125,126,127,128,129,130,131,132,133,134,135,136
 Seq#:137,138,139,140,141

VERIFICATION SUMMARY

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:48

Input Set : N:\efs\03_12_07\09732914B_efs\IVGN251_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

L:496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:514 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
L:1168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:0
L:1318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:0
L:1336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 after pos.:0
L:1354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108 after pos.:0
L:1372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:0
L:1390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:110 after pos.:0
L:1436 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:113 after pos.:0
L:1454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:114 after pos.:0
L:1496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:117 after pos.:0
L:1766 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139 after pos.:0
L:1784 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:140 after pos.:0